

CLAIMS:

1. A processor device for processing instructions, in particular very long instruction word (VLIW) instructions, comprising
 - memory means for storing instruction words, each instruction word consisting of segments,
 - 5 - fetching means for fetching instruction words from said memory means, and
 - executing means for executing instructions in accordance with instruction words fetched from said fetching means,characterized in that
said fetching means is adapted to fetch essentially those segments of an instruction word (line
10 i) only which contain relevant information.
2. The device according to claim 1,
wherein said memory means is adapted to store instructions words of a kind where the
instruction words have the same code size density.
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3. The device according to claim 2,
wherein said memory means is adapted to store non-compressed instructions words.
4. The device according to at least any one of the preceding claims,
20 wherein said memory means comprises a plurality of memory portions wherein each memory portion is provided to store one segment of an instruction word, and said fetching means is adapted to access those memory portions only which contain relevant information.
5. The device according to claim 1,
25 wherein said memory means includes a plurality of lines, each line being provided for storing a complete instruction word.
6. The device according to claim 4,

wherein the width of said memory means is divided over all lines into memory units in accordance with different segments of the instruction words so that each memory unit is formed by memory portions for storing instruction word segments of the same order and/or kind.

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7. The device according to claims 4 and 5, wherein all segments of the instruction words and said memory means have the same width, and each memory portion forms a separate line for storing an instruction segment.

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8. The device according to claims 4 and 5, wherein each line of said memory means is divided into said memory portions in accordance with different segments of the instruction words so that each memory portion is provided for storing one segment of an instruction word.

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9. A method for processing instructions, in particular very long instruction word (VLIW) instructions, in a processor device, comprising the steps of

- storing instruction words in a memory means, each instruction word consisting of segments,
- fetching instruction words from said memory means, and
- executing instructions in accordance with instruction words fetched from said

fetching means,
characterized in that
essentially those segments of an instruction word are fetched only which contain relevant information.

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10. The method according to claim 9, wherein the instruction words have the same code size density.

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11. The method according to claim 10, wherein the instructions words are not compressed.

12. The method according to at least any one of claims 9 to 11, further comprising the step of dividing said memory means into a plurality of memory portions wherein each memory stores one segment of an instruction word.

13. The method according to at least any one of the claims 9 to 12,
further comprising the step of dividing said memory means into a plurality of lines, wherein
each line stores a complete instruction word.

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14. The method according to claims 12 and 13,
further comprising the steps of dividing the width of said memory means over all lines into
memory units in accordance with different segments of the instruction words, and forming
each memory unit by memory portions for storing instruction word segments of the same
order and/or kind.

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15. The method according to claims 12 and 13,
further comprising the steps of providing all segments of the instruction words and said
memory means with the same width, and adapting each memory portion so as to form a
separate line for storing an instruction segment.

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16. The method according to claims 12 and 13,
further comprising the steps of dividing each line of said memory means into said memory
portions in accordance with different segments of the instruction words, and adapting each
memory portion so as to store one segment of an instruction word.

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